

ABSTRACT

The inventors have discovered that food and pharmaceutical compositions containing (-)-hydroxycitric acid, its salts, amides and esters can be employed for delaying gastric emptying and increasing receptive relaxation for preventing and treating diverse conditions. There are concomitant influences on glucagon-like peptides (GLP-1/2) and cholecystokinin (CCK). Altered gastric emptying and accommodation are found with forms of hypertension, liver dysfunction and gastrointestinal ulcers, especially duodenal ulcer. Numerous medications, such as antibiotics (erythromycin, indomethacin, etc.) and including even some diet drugs (e.g., Orlistat and other lipase inhibitors), can accelerate gastric emptying. Surgery, such as for peptic ulcers, itself can lead to clinical dumping syndrome, as can other types of surgery performed on the stomach. Other factors or conditions that lead to acceleration of gastric emptying include obesity, high-energy density of food, fat intolerance, early stages of noninsulin-dependent diabetes mellitus, Zollinger-Ellison syndrome, and intermittent episodes in other forms of diabetes. Various delivery methods that preferentially expose HCA to stomach and duodenal receptors and sensors without undue binding of the compound to inactivating substances are provided.